AMENDED CLAIMS

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original claims 1-45 replaced by new claims 1-36 (5 pages)]

1. A method of generating an enhanced T cell response in a patient to an antigen comprising:
administering to the patient an immunoglobulin or portion thereof wherein said immunoglobulin or portion thereof has at least one peptide epitope of said antigen attached to said immunoglobulin or portion thereof and administering said immunoglobulin or portion thereof in conjunction with a dsRNA segment to said patient.

2. The method of claim 1 wherein the immunoglobulin or portion thereof and said RNA segment are administered together.

3. The method of claim 1 wherein the immunoglobulin or portion thereof and said RNA segment are administered separately.

4. The method of claim 1 wherein said patient is human.

5. The method of claim 1 wherein upon administration of said immunoglobulin or portion thereof to said patient the immunoglobulin or portion thereof loads antigen presenting cells by engagement of the immunoglobulin with the antigen presenting cell's FcγR and said peptide epitope is effectively processed and presented by the MHC I pathway of antigen presenting cells resulting in effective loading of the MHC class I molecules and activation of T cells specific for said peptide.

6. The method of claim 1 wherein the peptide epitope is attached within the CDR region of the immunoglobulin or portion thereof.

7. The method of claim 1 wherein upon administration of said immunoglobulin or portion thereof to said patient the immunoglobulin or portion thereof loads the antigen presenting cell by engagement with the antigen presenting cell's FcγR and said peptide epitope is effectively processed and presented by the MHC II pathway of the antigen presenting cell resulting in effective loading of MHC class II molecules.

8. The method of claim 1 wherein the T cells are cytotoxic T lymphocytes.

9. The method of claim 1 wherein the RNA segment is dsRNA and is selected from the group consisting of pA:pU, pI:pC, pC:pG and dsRNA segments of mixed nucleotides.

10. The method of claim 1 wherein the peptide epitope is a T cell epitope.

11. The method of claim 1 wherein the peptide epitope is selected from the group consisting of influenza virus M1 or M2; hepatitis C virus NS3; hepatitis B virus core antigen; human papilloma virus HPV 18-E7, HPV 16 – E7, HPV 18 E6, HPV 16 E6; melanoma–gp100; MART-1; TRP-2; carcinoembryonic antigen precursor; Her –2; tetanus toxin universal T helper epitope; HIV-1: reverse transcriptase; HIV1: gag; insulin precursor–human; human Gad 65; prostate tumor antigens; mucin 1; herpes simplex antigens; and, respiratory syncytial virus antigens.

12. The method of claim 1 wherein the method induces an effective memory response to the peptide epitope.

13. A method of loading an antigen presenting cell and generating an immune response to an antigen in a patient by use of at least one peptide epitope attached to an immunoglobulin or portion thereof thereby forming an Ig–peptide complex wherein when the Ig-peptide complex is administered to a patient *in vivo* , in conjunction with dsRNA , the epitope is effectively processed and presented by the antigen presenting cell by the MHC I pathway resulting in effective loading of MHC class I molecules thereby resulting in an MHC class I – peptide complex and generating an enhanced T cell response to said delivered antigen.

14. The method of claim 13 wherein the immunoglobulin is human IgG.

15. The method of claim 13 wherein the antigen presenting cell is loaded via monovalent engagement of the FcγR of the antigen presenting cell.

16. The method of claim 13 wherein the peptide epitopes are covalently attached to the immunoglobulin.

17. The method of claim 13 wherein the peptide epitope is attached to the immunoglobulin without modification of the Fc portion of the Ig.

18. The method of claim 13 wherein the MHC class I –peptide complexes result in generation of robust Tc2 responses characterized by IL-4 but not IL-2 or IFN-γ-production.

19. The method of claim 13 wherein the peptide epitope is selected from the group consisting of influenza virus M1 or M2; hepatitis C virus NS3; hepatitis B virus core antigen; human papilloma virus HPV 18-E7, HPV 16 – E7, HPV 18 E6, HPV 16 E6; melanoma–gp100; MART-1; TRP-2; carcinoembryonic antigen precursor; Her –2; tetanus toxin universal T helper epitope; HIV-1: reverse transcriptase; HIV1: gag; insulin precursor – human; human Gad 65; prostate tumor antigens; mucin 1; herpes simplex antigens; and, respiratory syncytial virus antigens.

20. The method of claim 13 wherein the Ig peptide complex is administered to the patient by subcutaneous or intraperitoneal injection.

21. The method of claim 13 wherein the antigen presenting cell is selected from the group consisting of dendritic cells, monocytes, macrophages and B cells.

22. The method of claim 13 wherein the resulting MHC–peptide complexes formed by *in vivo* delivery are expressed for up to 1 to 2 weeks.

23. The method of claim 13 wherein the loading MHC-peptide molecules result in activation of T cells specific for said peptide.

24. The method of claim 13 wherein the loading of antigen presenting cells by peptide delivered within an immunoglobulin results in induction of Th2 immunity.

25. The method of claim 13 wherein IL-2, IFN-γ and IL-4 were down-regulated in a dose dependent manner and IL-10 and TGF-beta were upregulated in a dose-dependent manner.

26. The method of claim 13 wherein IgG1 and IgG2a antibody responses in the patient were increased and associated with an enhanced Th1 and Th2 response.

27. The method of claim 13 wherein the dsRNA was selected from the group consisting of pA:pU, pI:pC, pC:pG and dsRNA segments of mixed nucleotides.

28. The method of claim 13 wherein the dsRNA is pA:pU and induces MHC class I-restricted Tc1 cells thereby producing IFN-γ.

29. The method of claim 13 wherein the dsRNA segments are from 10 - 50 Kd.

30. A method of enhancing an immune response to an antigen in a patient in need thereof comprising administering to a patient at least one peptide epitope of said antigen attached to an immunoglobulin or portion thereof thereby forming an Ig-peptide complex and administering said Ig-peptide complex *in vivo* to said patient in conjunction with dsRNA wherein the Ig-peptide complex is capable of being endocytosed by cells bearing an Fc receptor wherein the epitope is effectively processed and presented by the MHC pathway of the cell resulting in effective loading of the MHC molecules and thereby resulting in an effective secondary expansion of the MHC molecules upon subsequent *in vivo* exposure to the antigen thereby resulting in an enhanced T cell response in the patient to said antigen.

31. The method of claim 30 wherein the cells are antigen presenting cells.

32. The method of claim 30 wherein the immunoglobulin is human IgG.

33. The method of claim 30 wherein the MHC pathway is the MHC I pathway.

34. The method of claim 30 wherein the enhanced T cell response is selected from the group consisting of Th1 cells, Th2 cells and cytotoxic T cells.

35. The method of claim 30 wherein the dsRNA is selected from the group consisting of pA:pU, pI:pC, pC:pG and dsRNA segments of mixed nucleotides.

36. The method of claim 30 wherein the peptide epitope is selected from the group consisting of the influenza virus M1 or M2, hepatitis C virus NS3, hepatitis B virus core antigen, human papilloma virus HPV 18-E7, HPV 16 – E7, HPV 18 E6, HPV 16 E6, melanoma–gp100, MART-1, TRP-2, carcinoembryonic antigen precursor, Her–2, tetanus toxin universal T helper epitope, HIV-1: reverse transcriptase, HIV1:gag, insulin precursor – human , human Gad 65, prostate tumor antigens, mucin 1, herpes simplex antigens, respiratory syncitial virus antigens, melanoma –gp100, MART-1, TRP-2, carcinoembryonic antigen precursor XP 064845/NCB1,Her –2, prostate tumor antigens and MUC 1.